

CLAIMS

What is claimed is:

1. A securing mechanism comprising:
- 5 a housing;
- a connector latch moveably mounted within the housing, the connector latch engageable with a connector to secure the connector; and
- a module latch moveably mounted within the housing, the module latch engageable with a housing support, engagement of the connector latch with the connector causing the module latch to engage the housing support.
- 10 2. The securing mechanism of claim 1 wherein the connector latch and module latch comprise a single latch.
3. The securing mechanism of claim 1 wherein the connector latch is formed as a first latch component and the module latch is formed as a second latch component, the first latch component matable with the second latch component.
- 15 4. The securing mechanism of claim 1 wherein the connector latch or the module latch includes a low friction surface wherein the low friction surface minimizes binding of the latch within the housing.
5. The securing mechanism of claim 1 wherein the connector latch comprises a position adjustment mechanism such that the position adjustment mechanism controls movement of the connector latch.
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FIG. 1

FIG. 2

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6. The securing mechanism of claim 1 further comprising a biasing mechanism wherein the biasing mechanism positions the connector latch and the module latch within the housing.
7. The securing mechanism of claim 1 further comprising a tool securing mechanism attached to the housing, the tool securing mechanism preventing motion of the latch within the housing.
8. The securing mechanism of claim 7 wherein the tool securing mechanism comprises a transverse slot within the housing.
9. A securing mechanism comprising:
a housing; and
a latch mounted within the housing, the latch having a connector latch protrusion, engageable with a connector, and a module latch protrusion, engageable with a housing support, engagement of the connector latch protrusion with the connector causing the module latch protrusion to engage the housing support.
10. The securing mechanism of claim 9 wherein the connector latch or the module latch includes a low friction surface wherein the low friction surface minimizes binding of the cable latch within the housing.
11. The securing mechanism of claim 9 wherein the latch comprises a position adjustment mechanism such that the position adjustment mechanism controls movement of the latch.
12. The securing mechanism of claim 9 further comprising a biasing mechanism wherein the biasing mechanism positions the latch within the housing.

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13. The securing mechanism of claim 9 further comprising a tool securing mechanism attached to the housing, the tool securing mechanism preventing motion of the latch within the housing.
- 5 14. The securing mechanism of claim 13 wherein the tool securing mechanism comprises a transverse slot within the housing.
15. A module comprising:
a module housing enclosing electronic components;
a securing mechanism mounted to the module housing, the securing
10 mechanism having a housing, connector latch moveably mounted to the housing and engageable with a connector and a module latch moveably mounted to the housing and engageable with a housing support, engagement of the connector latch with a connector causing the module latch to engage the housing support.
- 15 16. The module of claim 15 wherein the connector latch further comprises a position adjustment mechanism wherein the position adjustment mechanism is engageable with a tool.
17. The module of claim 15 further comprising a biasing mechanism wherein the biasing mechanism positions the cable latch and the module latch within the housing.
- 20 18. The module of claim 15 wherein the connector latch or the module latch includes a low friction surface wherein the low friction surface minimizes binding of the cable latch within the housing.

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19. The module of claim 15 further comprising a tool securing mechanism attached to the housing, the tool securing mechanism preventing motion of the latch within the housing.
20. The module of claim 19 wherein the tool securing mechanism comprises a transverse slot within the housing.
21. A method for securing a module to a bracket comprising:
 providing a module having a mating connector and a securing mechanism, the securing mechanism having a latch having a connector latch protrusion and a module latch protrusion;
 mounting the module to a housing support;
 raising the position of the latch to allow a connector to engage the mating connector and to cause the module latch to engage the housing support;
 releasing the latch to allow the connector latch protrusion to engage the connector and causing the module latch to remain engaged with the housing support.
22. The method of claim 21 further comprising:
 providing a latch positioning tool for adjustment of the position of the latch; and
 using the tool to adjust the position of the latch.
23. The method of claim 22 further comprising:
 providing a tool securing mechanism; and
 using the tool securing mechanism to prevent motion of the latch once the latch is in a raised position.

24. A method for removing a module from a housing support comprising:
- providing a module attached to a housing support, the module having a mating connector, a connector engaged with the mating connector and a securing mechanism having a latch with a connector latch protrusion and a module latch protrusion, the connector latch protrusion engaged with the connector and the module latch protrusion engaged with the housing support;
 - adjusting the position of the latch to disengage the connector latch protrusion from the connector;
 - removing the connector from the module;
 - releasing the latch to disengage the module latch protrusion from the housing support; and
 - removing the module from the housing support.

25. The method of claim 24 further comprising:
- providing a latch positioning tool for adjustment of the position of the latch; and
 - using the tool to adjust the position of the latch.

26. The method of claim 24 further comprising:
- providing a tool securing mechanism; and
 - using the tool securing mechanism to prevent motion of the latch once the latch is in a raised position.

27. A securing mechanism comprising:
- a housing;
 - a connector latch moveably mounted within the housing, the connector latch engageable with a connector to secure the connector;
 - a position adjustment mechanism attached to the connector latch, the position adjustment mechanism controlling movement of the connector latch; and

connector causing the

To be

allow bias means to

connection

Fig 7
can remove
connector from module
th latch
already released
is no further release step

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a slot formed within the housing, the slot securing a tool to the housing of the securing mechanism.

28. The securing mechanism of claim 27 further comprising a biasing mechanism wherein the biasing mechanism positions the connector latch within the housing.
- 5 29. The securing mechanism of claim 27 wherein the connector latch or the module latch includes a low friction surface wherein the low friction surface minimizes binding of the connector latch within the housing.

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